

Product Datasheet

2-port Gigabit Industrial Ethernet Switch

(ONV-IPS3021F)



OVERVIEW

The ONV-IPS3021F is a gigabit industrial Ethernet fiber switch independently developed by ONV. It has 1*10/100/1000Base-T adaptive RJ45 port and 1*1250Base-X uplink SC fiber port, and each port can support full line-rate forwarding.

The ONV-IPS3021F has excellent industrial field environment adaptability (mechanical stability, climate adaptability, electromagnetic environment adaptability, etc.). The protection level is IP30 and 5-year warranty. It is suitable for industrial scenes such as intelligent transportation, rail transit, power industry, mining, petroleum, shipping, metallurgy, and green energy construction to form a cost-effective, stable, and reliable communication network. Unmanaged model, plug and play, no configuration, easy to use.

FEATURE

- Gigabit access

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.
- ◇ Support Gigabit RJ45 port and 1.25G uplink SC fiber port combination to meet networking needs in various scenarios.

■ Stable and reliable

- ◇ CCC, CE, FCC, RoHS.
- ◇ The user-friendly panel can show the device status through the LED indicator of PWR and Link.
- ◇ Low power consumption, no fan, Aluminum alloy housing, and excellent heat dissipation to ensure the stable operation of the switch.

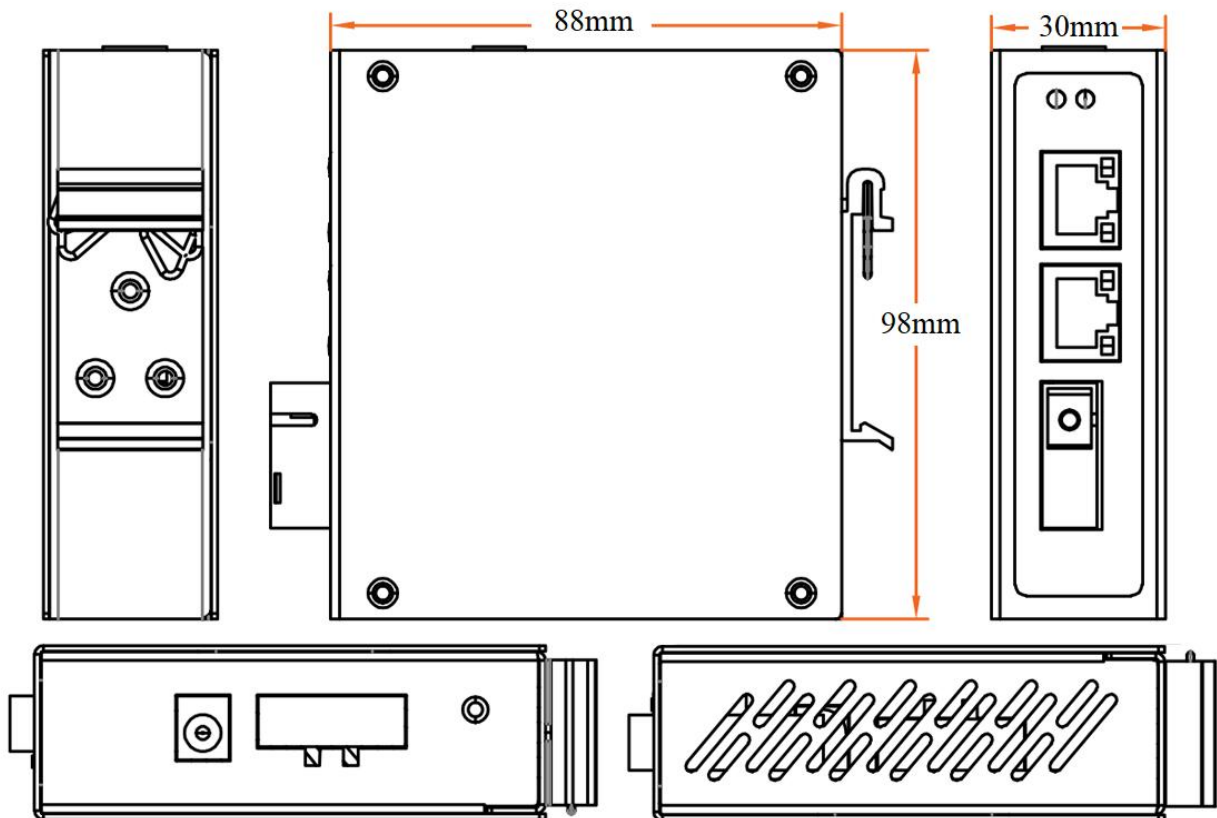
TECHNICAL SPECIFICATION

Model	ONV-IPS3021F
Interface Characteristics	
Fixed Port	1*DC5521 power socket 1*10/100/1000Base-T RJ45 port (Data) 1*1250Base-X uplink SC fiber port (Data) 2 sets V+, V- redundant DC power port (3P Phoenix terminal)
Ethernet Port	Port 1 can support 10/100/1000Base-T(X) auto-sensing, full/ half duplex MDI/ MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters)
Optical Fiber Port	Default optical module is single-mode dual fiber 20km, SC port
Optical Cable/ Distance	Multi-mode: 850nm/ 0-550m, 1310nm/ 0-2km, Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km
Chip Parameter	
Network Protocol	IEEE 802.3 10BASE-T, IEEE 802.3i 10Base-T, IEEE 802.3u 100Base-TX,




	IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	12Gbps (non-blocking)
Forwarding Rate @64byte	4.46Mpps
MAC	2K
Buffer Memory	2M
Jumbo Frame	9216bytes
LED Indicator	Power: PWR (Green), Network: Link (Yellow), Fiber port: G2(Green)
Power Supply	
Power Consumption	Standby<3W, Full load<5W
Working Voltage	DC12-48V, 3P industrial phoenix terminal, anti-reverse protection.
Power Supply	No, optional 12V/24W or 24V/24W industrial power supply
Physical Parameter	
Operation Temp/ Humidity	-40~+75°C, 5%~90% RH Non condensing
Storage Temp/ Humidity	-40~+85°C, 5%~95% RH Non condensing
Dimension (L*W*H)	98*88*30mm
Net /Gross Weight	0.25kg/ 0.35kg
Installation	Desktop, 35mm DIN Rail
Certification & Warranty	
Lightning Protection	Protection level: IP30 Lightning protection: 6KV 8/20us IEC61000-4-3 (RS):10V/m (80~1000MHz) FCC Part 15/CISPR22 (EN55022): Class B IEC61000-6-2 (Common Industrial Standard) IEC61000-4-9 (Pulsed magnet field): 1000A/m

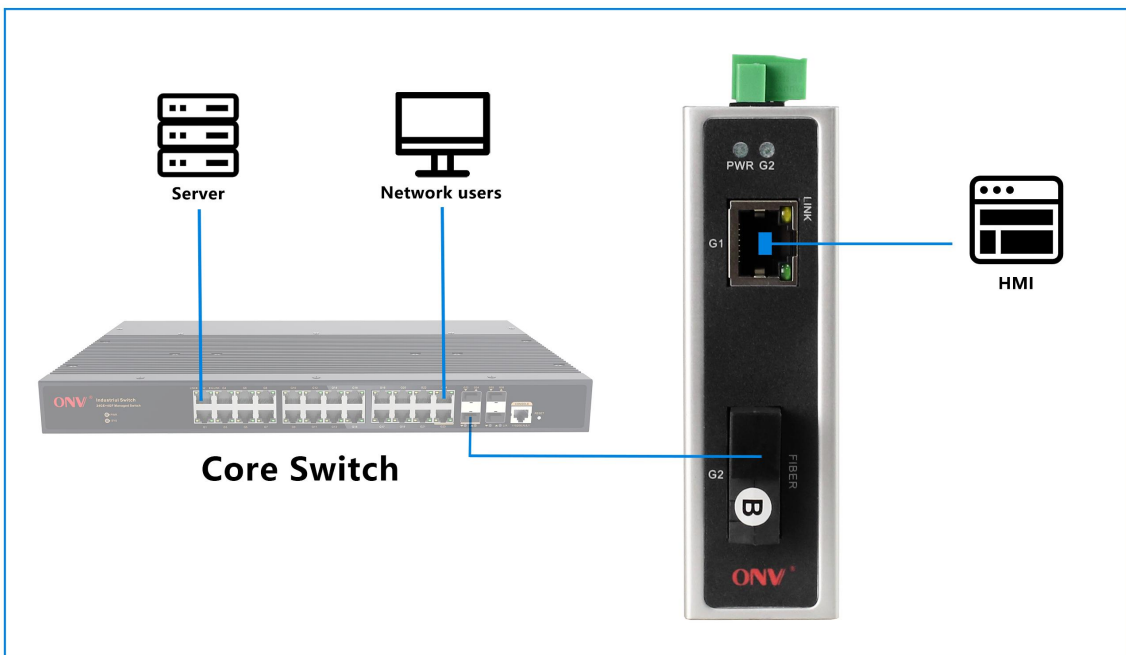
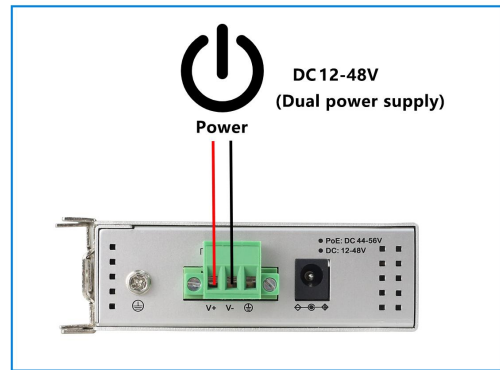
	<p>IEC61000-4-10 (Damped oscillation): 30A/m 1MHz</p> <p>IEC61000-4-12/18 (Shockwave): CM2.5kV, DM1kV</p> <p>IEC61000-4-4(EFT): Power cable: ± 4kV, data cable: ± 2kV</p> <p>IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s</p> <p>IEC61000-4-2 (ESD): ± 8kV contact discharge, ± 15kV air discharge</p> <p>IEC61000-4-6 (Radio frequency transmission): 10V(150kHz~80MHz)</p> <p>IEC61000-4-8 (Power frequency magnetic field): 100A/m, 1000A/m, 1s-3s</p> <p>IEC61000-4-5 (Surge): Power cable: CM± 4kV/ DM± 2kV, data cable: ± 4kV</p>
Mechanical Properties	IEC60068-2-6 (Anti Vibration), IEC60068-2-32 (Free Fall), IEC60068-2-27 (Anti Shock)
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Warranty	5 years, lifelong maintenance.

DIMENSION



APPLICATION

-  **Plug and play**
-  **Wide temperature range**
-  **DIN Rail installation**



ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS3021F	Unmanaged industrial Ethernet switch with 1*10/100/1000M RJ45 port and 1*1.25G uplink SC fiber port (1310nm/ 20km single-mode dual fiber optical module). It can support dual DC power input and DIN Rail mounting.	24W/24V
ONV-IPS3021F-A	Unmanaged industrial Ethernet switch with	24W/24V

	1*10/100/1000M RJ45 port and 1*1.25G uplink SC fiber port (1310nm/ 20km single-mode single fiber optical module). It can support dual DC power input and DIN Rail mounting.	
ONV-IPS3021F-B	Unmanaged industrial Ethernet switch with 1*10/100/1000M RJ45 port and 1*1.25G uplink SC fiber port (1550nm/ 20km single-mode single fiber optical module). It can support dual DC power input and DIN Rail mounting.	24W/24V

Note: The power supply is not included and needs to be purchased.

PACKING LIST

	Content	Qty	Unit
Packing List	2-port gigabit industrial Ethernet switch	1	SET
	User Guide	1	PC
	Warranty Card and Certificate of Conformity	1	PC

POWER SUPPLY

Product	Model	Description	Unit
24W DIN Rail Industrial Power Supply	GWS-DP24-12	DIN Rail 24W single set of output power supply Input Voltage: AC100V~240V 50-60H, 0.35A Output Voltage: DC12V, 2.0A Operation Temperature: -40°C to +70°C	PC
24W DIN Rail Industrial Power Supply	GWS-DP24-24	DIN Rail 24W single set of output power supply Input Voltage: AC100V~240V 50-60H, 0.35A Output Voltage: DC24V, 1.0A Operation Temperature: -40°C to +70°C	PC

CONTACT US

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